Preventing Common Vaccine Administration Errors

Vaccine administration errors can lead to patient harm, inconvenience, wasted vaccine, and time. Such errors can be prevented by adhering to the "6 Rights of Vaccine Administration." By following these recommended practices, one can prevent vaccination errors; minimize adverse events; prevent wastage; avoid repeat doses; and assure that vaccines given are necessary, potent, effective and safe.

The 6 Rights of Vaccine Administration are:

- Right Vaccine
- Right Patient
- Right Documentation
- Right Dosage
- Right Time
- Right Manner/Route

Tips for Avoiding Common Vaccine Administration Errors

Do not give expired vaccines.

- Use vaccines with the shortest expiration date first. Rotate vaccines so that those with the shortest expiration dates are in the front of the refrigerator or freezer.
- Check your refrigerator and freezer often to dispose of any expired vaccines.

Avoid giving the wrong vaccine.

- Do not store sound-alike or look-alike vaccines next to each. Store vaccines separately from other medications and biologics.
- Label baskets in your refrigerator and freezer with the age indications for the vaccines that are in the baskets.
- Check all vaccine labels at least 3 times before administering.
- Don't pre-fill syringes unless it is necessary (e.g. immediately before mass vaccination clinics). If you do pre-fill syringes, label each syringe and/or storage bin with the vaccine name. Manufactured pre-filled syringes are another good option, as the name of the vaccine is printed on the syringe.

Check for contraindications before vaccinating.

 Review the "Guide to Contraindications and Precautions to Commonly Used Vaccines" Chart (<u>www.immunize.org/catg.d/p3072a.pdf</u>) with staff.

Post educational materials and reminders.

- "Tdap or DTaP" poster: www.eziz.org/assets/docs/IMM-508.pdf
- "Vaccine Acronyms and Abbreviations" poster: www.eziz.org/PDF/IMM-895.pdf
- "Influenza Vaccine Identification Guide" poster: <u>www.eziz.org/PDF/IMM-859.pdf</u>
- "Preparing Reconstituted Vaccines" poster: www.eziz.org/PDF/IMM-897.pdf

Additional Resources on How to Properly Reconstitute Vaccines.

- Attend the Los Angeles County Department of Public Health's Immunization Skills Institute course at www.publichealth.lacounty.gov/ip
- Review the Centers for Disease Control and Prevention's "Vaccine Storage and Handling Toolkit" at www.cdc.gov/vaccines/recs/storage/toolkit/default.htm

6 Rights of Vaccine Administration



Right Vaccine

Triple check the label to ensure you are administering the right medication. Always use the right diluent for the right vaccine.

Right Patient

Verify the patient's information. Always ask the patient their name and date of birth prior to vaccination.

Right Documentation

Document the VIS date, manufacturer, lot number, clinic name, and the person administering the vaccine.

Right Dosage

Split or partial vaccine doses are NOT recommended.

Right Time

Follow recommended intervals and age recommendations. Administer vaccine before the expiration date.

Right Manner/Route

Review the package insert to determine the correct route of administration.

Immunization Skills Institute (ISI)

ISI is a 4-hour course that trains medical assistants on safe, effective, and caring immunization skills. Topics include:

- Proper vaccine administration techniques
- Immunization documentation
- Effective communication
- Vaccine storage and handling

For more information or to register, visit the Immunization Program website at www.public health.lacounty.gov/ip or call (213) 351-7800.

Rev. March 14, 2013





Vaccine Administration

Diluent Tipsheet: Right Medication = Right Diluent + Right Vaccine

Vaccine	Diluent	Powder
DTaP-IPV/Hib (Pentacel)	DTaP – IPV (sanofi)	Hib (ActHIB)
Hib (ActHIB)	0.4% Sterile saline (sanofi)	Hib (ActHIB)
Hib (Hiberix)	0.9% Sterile saline (GSK)	Hib
MMR (MMR-II)	Sterile water (Merck)*	MMR
MMRV (Proquad)	Sterile water (Merck)*	MMRV
MenACWY _{CRM} (Menveo)	MenCWY (Novartis)	MenA
MenCYHib (MenHibrix)	0.9% Sterile saline (GSK)	MenCY and Hib
RV1 (Rotarix)	Sterile water, calcium carbonate, and xanthan (GSK)	RV1
VAR (Varivax)	Sterile water (Merck)*	VAR
ZOS (Zostavax)	Sterile water (Merck)*	ZOS

Several vaccines in powder form require reconstitution (mixing) prior to administration. An important step in providing the right vaccine is ensuring that the correct diluent (liquid) is used to reconstitute the powder. If the wrong diluent is used, the dose may need to be repeated. Follow these steps to ensure that you mix the right powder with the right diluent.

- Review the manufacturer's packaging to verify the correct diluent (liquid) used to reconstitute the powder. Most diluents are not interchangeable.
- Verify the diluent and vaccine with a colleague and/or physician prior to reconstituting any vaccine.
- Clearly label your diluents indicating the vaccine or vaccines for which they should be used.

Check the manufacturer's package information regarding the time limit for using the vaccine once it is reconstituted. The clock is ticking once the vaccine is reconstituted and the time frame varies by vaccine. Finally, never attempt to make your own combination vaccines. Always follow the manufacturer's recommendation.

^{*}Diluent is interchangeable and can be used for Merck's MMR, MMRV, Varicella and Zoster vaccines.

